

Definition of Terms

Information and Communication Technology (ICT) deals with the use of different communication technologies such as mobile phones, telephone, Internet, etc. to locate, save, send and edit information

Internet a globally connected network system facilitating worldwide communication and access to data resources through a vast collection of private, public, business, academic and government networks.

World Wide Web is one of the services communicated over the internet by functioning as a wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents.

Current State of ICT

1. **Convergent Technologies** This is when multiple different devices combine into a single gadget because of technological advancement. One example of this is smartphone, where it is capable of doing the functions of a television, radio, computer, telephone, camera and GPS as a single device.

Current State of ICT (cont)

2. **Social Media** These are software, applications or platforms that allow users to communicate in an online social communities or network. Social media allows people to communicate faster through a larger number of people.

3. **Mobile Technologies** - This is a term for devices that are easily carried and allows fast means of communication. These devices from the past were originally big and bulk, but due to the technological advancement, they become smaller and more compact.

World Wide Web (W3)

Web 1.0 is the original incarnation of the Internet as a place where most data was read-only therefore dubbed as *static web page*.

Web 2.0 the read/write web or the *dynamic web pages*, where web fields and forms have allowed users to participate in transactions, upload resources or post their own suggestions in active conversation

Web 3.0 the posited future Internet called the *semantic web*, where Internet data will have evolved relationships, and mapping will help automate a lot of what we now do on the Internet manually. The semantic web, proponents suggest, will be a web that is in many ways automated by linking individual virtual objects and websites together in a seamless manner



Computer Laboratory Rules and Regulations

Don'ts inside the Computer Lab

1. Do not eat or drink inside the laboratory
2. Avoid stepping on electric wires or any other computer cables.
3. Do not insert metal objects into the computer casings.
4. Do not remove anything from the computer laboratory without permission.
5. Do not touch, connect, or disconnect any plug or cable without permission.
6. Do not touch any circuit boards and power sockets when something is connected to them or switched on.
7. Do not open an external device without scanning them for computer viruses.
8. Do not change the icons on the computer screen.
9. Do not switch the keyboard letters around.
10. Do not go to programs you don't know of.
11. Do not install any other programs unless told.
12. Do not unplug anything unless the computer has properly shut down.
13. Do not copy the work of other students.
14. Do not attempt to repair, open, tamper, or interfere with anything inside the lab.
15. Do not plug any other devices.

Do's inside the Computer Lab

1. Turn off the machine when you are no longer using it.
2. Report any broken plugs or exposed electrical wires to the teacher immediately.
3. Always SAVE your progress.
4. Always maintain an extra copy of all your data files.
5. Make sure your external devices are MALWARE FREE.
6. Feel free to ask for assistance.
7. Behave properly and clean up after yourself.
8. Keep the computer laboratory clean.

Ten Rules of Internet Etiquette

Netiquette is an abbreviation of Internet etiquette or network etiquette. It is guidelines for courteous communication in the online environment.

Rule 1: Remember the Human

You need to remember that you are talking to a real person when you are online. The internet brings people together who would otherwise never meet. Remember this saying when communicating online: Would I say this to the person's face?

Rule 2: Adhere to the same standards online that you would follow in real life

You need to behave the same way online that you do in real life. You need to remember that you can get caught doing things you should not be doing online just like you can in real life. You are still talking to a real person with feelings even though you can't see them.

Rule 3: Know where you are in cyberspace

Always take a look around when you enter a new domain when surfing the web. Get a sense of what the discussion group is about before you join it.

Rule 4: Respect other people's time and bandwidth

Remember that people have other things to do besides read your messages. You are not the center of their world. Keep your post and emails to a minimum by saying what you want to say. Remember everyone won't answer your questions.

Rule 5: Make yourself look good online

Remember to always check your spelling and grammar before posting. Always know what you are talking about and make sense saying it.

Rule 6: Share expert knowledge

Ask questions online. Share what you know online. Post the answers to your questions online because someone may have the same question you do.

Rule 7: Help keep flame wars under control

Netiquette does not forbid flaming. Netiquette does however forbid people who are flaming to hurt discussion groups by putting the group down.

Rule 8: Respect other people's privacy



Ten Rules of Internet Etiquette (cont)

Do not read other people's personal messages without their permission. Going through other people's things could cost you your job or you could even go to jail. Not respecting other people's privacy is bad netiquette.

Rule 9: Don't abuse your power

Do not take advantage of other people just because you have more knowledge or power than them. Treat others as you would want them to treat you if the roles were reversed.

Rule 10: Be forgiving of other people's mistakes

Do not point out mistakes to people online. Remember that you were once the new kid on the block. You still need to have good manners even though you are online and can not see the person face to face.

Online Safety and Security

Type of Information	Risks
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First name	There is a risk in sharing your first name. Chances are, a hacker may already know plenty of stuff about you even if you only give out your first name. Likewise, you cannot just walk in a room and start introducing yourself to everyone. You do not know whom you can come across with.
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Online Safety and Security (cont)

Last name	If sharing your first name is small risk, having both your first and last is more risky. You will be vulnerable to being searched for using search engines, which include image search. Matching a name with a face is a modus to several cybercrimes like identity theft
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Middle name	Sharing your middle name alone is probably not the most risky of these shared information, but sharing your full name would be
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Current and previous school(s)	Most people who steal identities study their subject. They can use this information for verification purposes
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Your cellphone number	Your cellphone number should never be posted over the Internet. The Internet is a public place. It is the same as posting your number on a billboard. You would not want random strangers to text or call you, or worse, pretend that they are someone you lose your password.
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Online Safety and Security (cont)

The name of your mother and father

Risky, yet not as risky as posting their full names, especially your mother's maiden name. In fact, you may have already encountered many websites that require your mother's maiden name as answer to a secret question whenever you lose your password.

The name of your siblings

Disclosing this is a huge risk. Strangers may pretend or use their identity to dupe you.

Your address

Giving the internet your number is one thing; giving them your address is a whole other level. It would be much easier for criminal to find you.

Your home phone number

This shared information is more risky than sharing your personal phone number. Scams usually use this information to deceive you, one of which is when a stranger pretends to know your parents or pretend to be you.

Online Safety and Security (cont)

Your birthday

Letting people know your birthday is probably a must if you want to get as many gifts as possible. But having it in your profile makes you vulnerable to identity theft.

Internet Threats

Web-based threats, or online threats, are a category of cybersecurity risks that may cause an undesirable event or action via the internet. Web threats are made possible by end-user vulnerabilities, web service developers/operators, or web services themselves. Regardless of intent or cause, the consequences of a web threat may damage both individuals and organizations.

1. **Malware** catch-all term for any type of malicious software designed to harm or exploit any programmable device, service or network.

A. **Virus** a malicious program designed to replicate itself and transfer from one computer to another (internet, local networks, FDs, CDs, etc.)

B. **Worm** a malicious program that transfers from one computer to another by any types of means. Scripts that run, replicate, and spread autonomously without the help of a related program. Ex. ILOVEYOU Worm

C. **Trojan** malicious program that disguises as useful program but once downloaded or installed, leaves your PC unprotected and allows hackers to get your information.



Internet Threats (cont)

- D. **Spyware** tracking programs that runs in the background without you knowing it. It has the ability to monitor what you are currently doing and typing through keylogging.
- E. **Adware** a program designed to send you advertisements, mostly as pop-ups.
- 2. **SPAM** an unwanted email mostly from bots or advertisers. It can be used to send malware.
- 3. **Phishing** an unwanted acquisition of sensitive personal information like passwords and credit card details.
- 4. **Botnet** Hijacking a user device for remote, automated use in a network of similar "zombies." These are used to accelerate spam campaigns, malware attacks, and more.
- 5. **Denial of Service Attack** disrupts computer access to internet services
- 6. **Cybercrimes/Exploits**
 - A. **Cyberbullying** mental abuse of victims using online threats and harassment
 - B. **Cyber Libel** Also known as online defamation, this can involve attacking individuals or organizations' reputations. This can be done through disinformation (deliberate distribution of inaccurate information) or misinformation (mistaken distribution of inaccurate information).
 - 8. **Spoofing** Masking a real identity to manipulate legitimate computer systems. Examples include IP spoofing, DNS spoofing, and cache poisoning.

Google Searching

Q Google searches by **keyword**. Which means if any word you typed into the search box is found anywhere on a web page, the web page will pop up in the results page. the pages are ranked by the top viewed web pages. This means that popular sites are listed first.

Q A **basic search** is when you enter a term into the search box without using any tools to narrow the search down. Generally, every word matters, capitalization and punctuation don't matter.

A basic search can have problems, like bringing information that is irrelevant, or has nothing to do with what you wanted, incorrect information, or unreliable information.

Q Elements of Advanced searching are called **limiters** because they limit the range of information that appears on the results page.

Google Search Operators

Google search operators are special characters and commands sometimes called "advanced operators" or search parameters that extend the capabilities of regular text searches.

Syntax	Description	Example
"" ""	used to search for an exact phrase in an exact order with no changes	""best news ever""
site:	To look for something within a specific website or class of websites	site:wikipedia.org
-	To exclude a term from a search in order to narrow the search by what you DON'T want to find	new -bad
+	Force an exact-match search on a single word or phrase without any automatic synonym matching	jobs +apple
OR	To allow either one of different words as a result	presidential candidates 2008 OR 2004

